

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 06066766
PUBLICATION DATE : 11-03-94

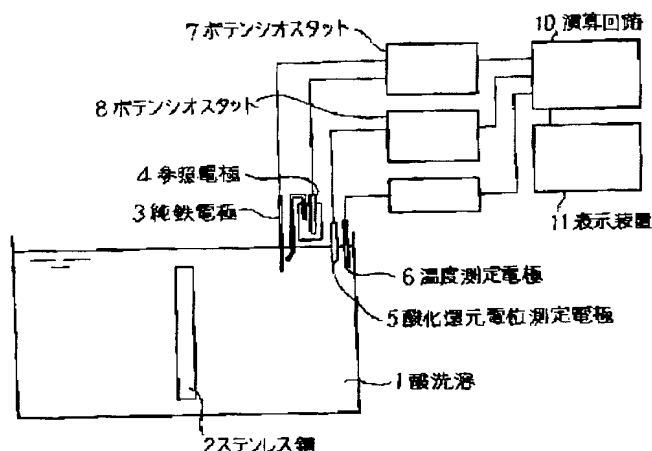
APPLICATION DATE : 20-08-92
APPLICATION NUMBER : 04221198

APPLICANT : MITSUBISHI HEAVY IND LTD;

INVENTOR : OTA SEIJI;

INT.CL. : G01N 27/416

TITLE : METHOD FOR MEASURING IRON ION
CONCENTRATION OF PICKLING BATH
FOR STEEL STRIP



ABSTRACT : PURPOSE: To obtain a method which is suitable for the management of a pickling bath and by which the Fe^{3+} and Fe^{2+} concentrations of the pickling bath can be continuously and automatically measured.

CONSTITUTION: At the time of using the method, calibration curves for E, $\text{E}'\text{-Fe}^{3+}$, and Fe^{2+} are prepared in advance by dipping a pure-iron electrode 3 in a pickling bath for steel strips and measuring the pure-iron spontaneous potential of the pickling bath between the electrode 3 and a reference electrode 4, and then, measuring the Fe^{3+} and Fe^{2+} concentrations of the bath by chemical analysis during the potential measurement. The Fe^{3+} and Fe^{2+} concentrations are found by measuring the pure-iron spontaneous potential E and oxidation- reduction potential E' during the pickling of a steel strip 2 and applying the measured potentials E and E' to the calibration curves.

COPYRIGHT: (C) JPO